RESTRICTED CIRCULATION

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Agricultural Memorandum No 680b

Weather and the Febrile Common Cold

L P Smith

The analysis of Ag Mem 680a was repeated as follows:-

(a) 60 sets of 4 week morbidity data (C), mean weekly cases per 100,000

(b) Week previous cases as infection factor (F)

(c) Mean over previous 12 weeks; excess of 75, as immunity factor (M).

(d) Mean of Kew and Speke air minimum temperature (not adjusted for those in excess of 12 °C), over 4 week periods starting 3 days previous to the 4 week morbidity data, arranged in two steps

(i) up to a maximum of 4 °C (N_1)
(ii) excess, if any over 4 °C (N_2)

The regression found was:-

$$C = 121 + 0.5F - 0.57M - 17.4N_1 - 4.2N_2$$

with a multiple correlation of 0.84

and partial correlations 0.58 on F
-0.42 on M
-0.56 on combined temperature factor.

Tested over 39 independent sets of morbidity data the correlation between actual and estimated values was 0.85.

Any comments or suggestions on this paper should be referred to the author.

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